

## Chapter 16. Street Systems

As discussed in Chapter 4, Community Vision, the street systems within PPGN are a core component of the overall planning framework and are integral to establishing PPGN as a New Traditional Community. The street systems within PPGN will be designed to function as efficient movement corridors that also fulfill a role as an important component of the overall community design and contribute to shaping the sense of place and social life of the community. In order to promote the desired streetscape throughout PPGN, this Chapter sets forth the overall vision for the PPGN street systems as well as defines unique street cross sections and right-of-way standards that support the desired formal, pedestrian friendly environment this is a key design characteristic of the overall community.

### 16.1. Great Streets Vision.

The overall connectivity network within PPGN, which includes the streets, pedestrian walkways and trails, and bicycle circulation systems, will be built upon many of the recognized elements of “Great Streets.” The “Great Streets” concept recognizes that streets are an important public place and should be designed to provide equal access to all modes of transportation. A “Great Street” can be divided into three realms, the Street Realm, Pedestrian Realm, and Private Realm as discussed below.

1. **Street Realm.** The street realm generally accommodates non-pedestrian modes of transportation and is comprised of the vehicular travel lanes as well as bicycle lanes, public transit facilities, on-street parking areas, median areas and pedestrian cross walks.
2. **Pedestrian Realm.** The pedestrian realm is comprised of the areas generally back of curb and oriented towards pedestrian use. The pedestrian realm includes elements such as sidewalks, street trees and landscaping, lighting, bike racks, transit shelters and signage.
3. **Private Realm.** The private realm includes private land uses and buildings, off-street parking areas, and other private elements such sidewalk dining, and street facing open space areas

Each realm is an important component of the overall streetscape and should be given equal design consideration. The following are key design elements of “Great Streets” that will be incorporated into the street design within PPGN.

1. Connected, gridded street system.
2. Balance among various modes of transportation.
3. Sidewalks separated from vehicular traffic by landscaping or curbs.
4. Street trees and landscape buffers.
5. Shaded pedestrian amenities, including street furniture.

6. Visually narrowed street through the use of street trees and buildings oriented towards the street.
7. Strategic, but limited use of cul-de-sacs designed to foster connectivity.
8. Appropriate intensity lighting for both vehicular and pedestrian users.
9. Parking on the street where appropriate.
10. Off-street parking areas generally oriented away from the street unless operational needs demand otherwise.
11. Diversity of land use along the streetscape.
12. Continuity between land uses.
13. Private land uses that engage the street.
14. Appropriate directional and wayfinding signage.
15. Use of architectural features that contribute towards a unique sense of place.

### **16.2. PPGN's Great Streets.**

The "Great Streets" concept has been refined for use within PPGN. The street system within PPGN will be both formal and simple, providing uncomplicated access to the various land uses and establishing a strong backbone for landscaping throughout the community. Streets will be visually narrowed through the use of classic, formal tree-lined streets and other design elements such as landscape buffering and medians. A signature feature of the PPGN street system is a network of focal roundabouts that will act as both a formal terminus for each internal roadway segment and as an important community identity element. The roundabouts will be complimented by adjacent parks that are positioned to accent these special community features and identify recreational nodes.

Neighborhood planning will be closely coordinated with the streetscape design to promote an active, lively street scene that is complimented by homes and buildings oriented towards the street with public places such as porches, patios and courtyards designed to enliven the front yard experience. Non-residential areas will include design elements such as shaded sidewalks, outdoor seating and dining, buffer areas for protection from vehicles, and distinctive and functional design elements that create interesting places along the streets. Parking areas will be visually minimized and located to the side or behind buildings where possible.

The streets within PPGN will also be designed to extend and enrich the open space system and network of pedestrian pathways throughout the community. A comprehensive on-street sidewalk system is planned that will be interconnected to off-street pedestrian trails and paseos. Pedestrian pathways will be designed to promote walkability and provide an amenity for each neighborhood while forging strong links with surrounding neighborhoods. The trail and paseo system will include direct linkages to the on-street connectivity system, resulting in a highly accessible and connected community designed to serve the varying needs of all residents and users.

Pedestrian pathways are more fully discussed within Chapter 10, Parks and Open Space Systems.

DU1 will incorporate a primary pedestrian oriented street as a central design element to create a walkable, pedestrian friendly environment with shops, offices and higher density housing. The primary pedestrian oriented street will incorporate buildings developed close to the street frontage, a pedestrian friendly sidewalk area, and on-street parking. The primary pedestrian oriented street may be developed as either a public street or private drive. A specific cross section and design guidelines for the primary pedestrian oriented street will be included within the DUP for DU1.

The result will be a highly connected community that fosters thoughtful integration of land uses through a multi-modal connectivity network that balances the needs of competing modes of transportation by welcoming and encouraging walking, jogging, and biking as primary modes of transportation in addition to traditional automotive travel.

### **16.3. PPGN Roadway Classifications and Right of Way Standards.**

PPGN's roadway system is comprised of three main roadway classifications, 1) Arterials, 2) Community Collectors and Neighborhood Entry Streets, and 3) Local Streets. The hierarchy of internal streets gives structure to the overall community and is designed to provide efficient vehicular circulation to the perimeter regional transportation corridors, including Ellsworth, Crismon and Williams Field Roads, and the future SR24 freeway. Multiple connections to the perimeter arterial streets will be established to promote an even distribution of traffic that minimizes impacts on individual neighborhoods and adjacent communities (see Exhibit 16.1, Transportation Plan).

In order to implement the PPGN Great Streets concept, unique street cross sections have been designed for use within PPGN (see Exhibit 16.2, Community Street Cross Sections and Exhibit 16.3, Streetscape Concept). With the exception of arterials, which will be developed utilizing the City of Mesa design standards, unique cross sections are proposed for the Community Collectors, Neighborhood Entry Streets, and Local Streets within PPGN. Utilities, landscaping and sidewalks will be located back of curb within in a Public Facilities and Utilities easement. While it is intended that these unique street cross sections be utilized throughout PPGN, the location of specific street cross sections will be identified at the DUP planning stage for arterials and collectors, and at the Site Plan Review and Design Review or Subdivision Plat planning stage for local streets. The PPGN street cross sections represent a modification of the City of Mesa Design and Engineering Standards and, therefore, are subject to approval pursuant to the procedures outlined in 3.12(c). The City of Mesa Design and Engineering Standards are the default standards for all aspects of street design unless modified pursuant to Chapter 3.12(c).



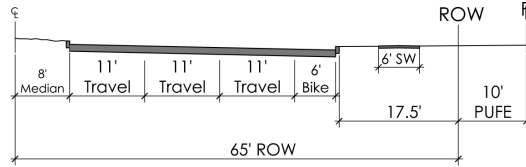
*Exhibit 16.1, Transportation Plan*

#### 16.4. Master Traffic Impact Analysis.

As part of the PPGN Community Plan, a Master Traffic Impact Analysis (“Master TIA”) has been submitted for review and approval. The Master TIA analyzes entire PPGN development based on maximum allowable densities and estimates traffic generation and traffic distribution as well as establishes lane configurations and traffic control needs both internal to PPGN and at adjacent intersections and roadways. Pursuant to the DUP Administration procedures outlined in Chapter 3.7, an update to the Master TIA will be prepared with each DUP. Further, updates to the Master TIA may be required if significant changes are made to the land uses and assumptions utilized to prepare the Master TIA. The Master TIA is included as Appendix 19.5.

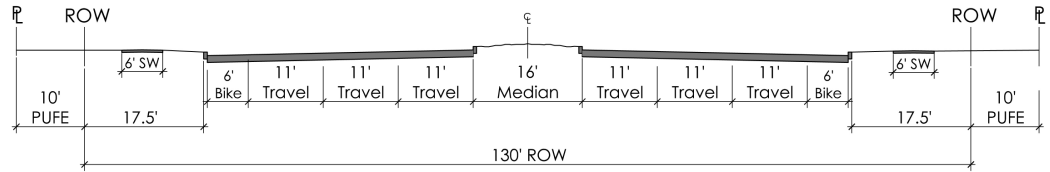
## A1

Arterial Roadway  
1/2 Street (3 Lane)  
Ellsworth Road



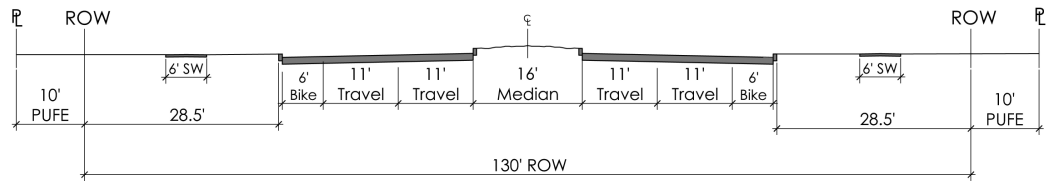
## A2

Arterial Roadway  
(6 Lane)  
Williams Field Road



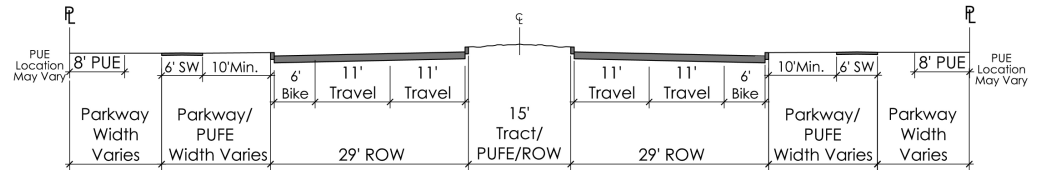
## B

Arterial Roadway  
(4 Lane)  
Crismon Road



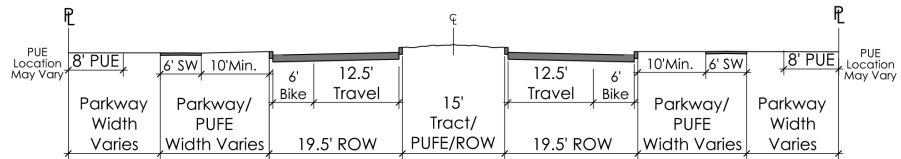
## C

Community Collector  
(4 Lane)



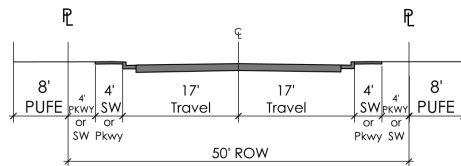
## D

Community Collector Road &  
Neighborhood Entry (2 Lane)



## E1

Local Street



## E2

Local Street

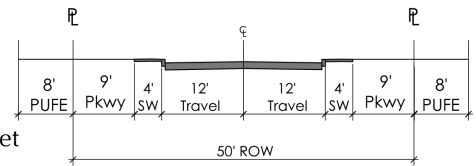
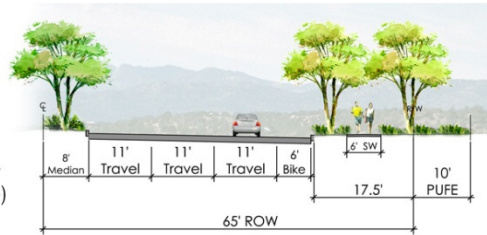


Exhibit 16.2, Community Street Cross Sections

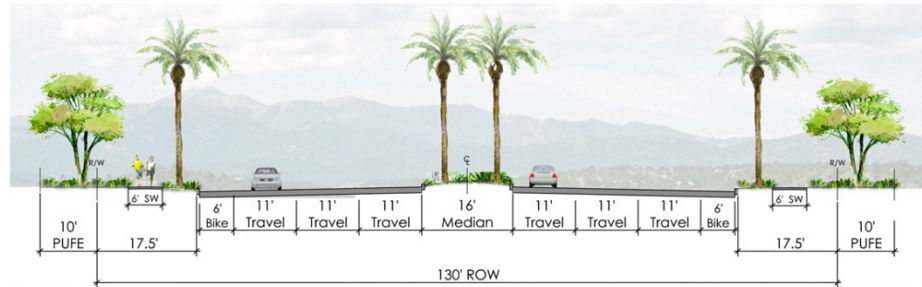


## Streetscape Concept

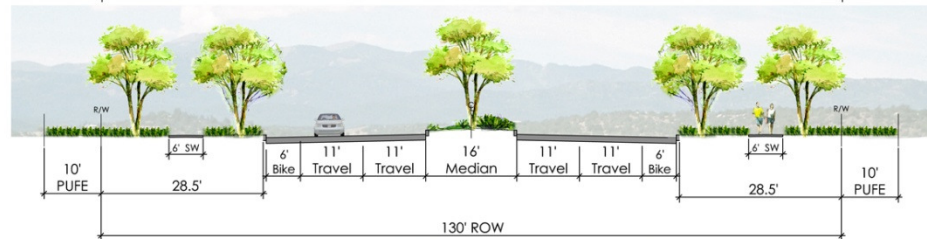
**A1**  
Arterial Roadway  
1/2 Street (3 Lane)  
Ellsworth Road



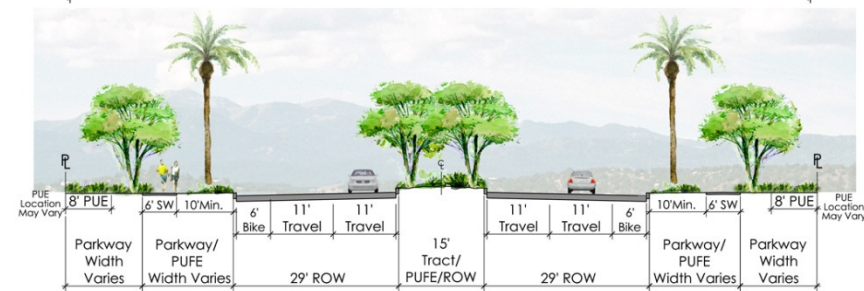
**A2**  
Arterial Roadway  
(6 Lane)  
Williams Field Road



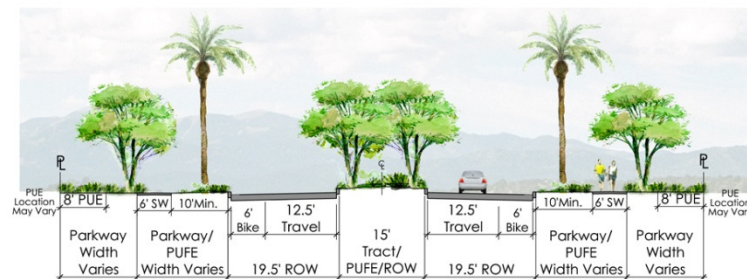
**B**  
Arterial Roadway  
(4 Lane)  
Crismon Road



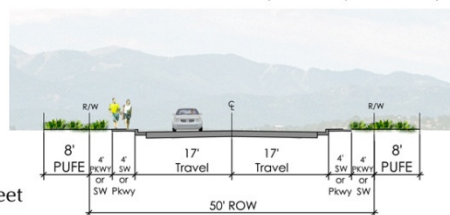
**C**  
Community Collector  
(4 Lane)



**D**  
Community Collector Road &  
Neighborhood Entry (2 Lane)



**E1**  
Local Street



**E2**  
Local Street

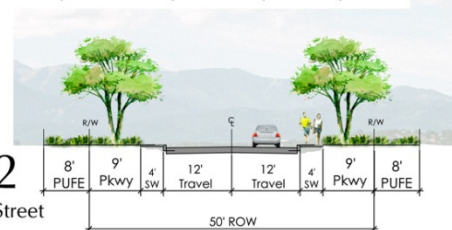


Exhibit 16.3, Community Streetscape Concept